```
EXHIBIT
 1
                  UNITED STATES DISTRICT COURT
 2
                   DISTRICT OF NEW HAMPSHIRE
                                                         6
                                                      21-cv-00260-PB
 3
 4
    SECURITIES AND EXCHANGE
                                   ) Civil Action No.
                                    ) 1:21-cv-00260-PB
    COMMISSION,
 5
                   Plaintiff,
 6
                                     VOLUME 1
       VS.
                                      (Pages 1 to 283)
 7
    LBRY, INC.,
 8
                   Defendant.
 9
10
11
12
            CONFIDENTIAL VIDEOTAPED DEPOSITION OF
13
                        ALEX GRINTSVAYG
14
                  1155 AVENUE OF THE AMERICAS
15
                      NEW YORK, NEW YORK
16
                   THURSDAY, MARCH 17, 2022
17
18
19
20
21
22
23
    REPORTED BY:
24
   ELBIA BAIRES
25
    JOB NO. 220317LHR
                                                                1
```

```
09:46
      1
               A.
                     LBRY.
       2
               Q.
                     What is LBRY, Inc.?
       3
               A .
                     A company.
                     And what does -- what is -- what
       4
               Q.
      5
09:46
                    if any, does LBRY, Inc. provide?
          services,
       6
                     We work on the LBRY protocol.
               A .
       7
               Q.
                     Anything else?
       8
               A .
                     I'm not sure what you mean.
       9
                     Well, the -- what product does LBRY,
               Q.
09:46 10
          Inc. have?
      11
                     The -- the application, like the LBRY
               A .
      12
          application.
      13
               Q.
                     What are those?
                    There's a desktop app, there's a
      14
               A .
09:47 15
          mobile app, there's a web app. I think that's
      16
          it.
                     And who are LBRY, Inc.'s customers or
      17
               0.
      18
          clients, if any?
      19
                     MR. DIXON: Objection. Vague.
09:47 20
               Α.
                     Yeah. I mean, I'm not sure what you
      21
          mean.
      22
               Q.
                     Who consumes LBRY, Inc.'s product or
          services?
      23
      24
               Α.
                     People.
09:47 25
               Q.
                     Is there like a certain segment of
                                                                  15
```

```
09:48
                     Who is that?
       1
               Q.
       2
               Α.
                     Jeremy Kauffman.
       3
                     And Kauffman is K-U-F-F-M-A-N (sic)?
               Ο.
       4
               Α.
                     Yes.
09:49
       5
                     Have you ever had a different title
               Q.
          or position at LBRY, Inc.?
       6
       7
               Α.
                     No.
       8
               Q.
                     Was your title ever the chief
       9
          infrastructure officer?
09:49 10
                     No -- um -- maybe. I don't remember.
               Α.
      11
          It's possible.
      12
                  Is there currently a chief
      13
          infrastructure officer at LBRY, Inc.?
      14
               Α.
                     No.
09:49 15
                     Were your -- I'm just -- when did you
               Q.
      16
          start at LBRY, Inc.?
                     In -- in 2016.
      17
               Α.
      18
                     And have your duties and
               0.
      19
          responsibilities changed since when you started
09:49 20
          until -- until the present?
      21
                     I don't think so. But I -- I
      22
          guess -- there might have been another CTO. And
      23
          then I became CTO eventually. I don't remember
      2.4
          part of it all.
               Q. Who is Mike Zargham?
09:50 25
                                                                   17
```

09:50	1	<b>A.</b>	Mike used to work at LBRY and was
	2	was CTO.	Officially. For a short period of
	3	time.	
	4	Q.	And you replaced him as CTO?
09:50	5	Α.	I think so, yeah.
	6	Q.	So if I can just get into a little
	7	bit of the	structure of the employees at LBRY,
	8	Inc.	
	9		How many employees are there
09:50	10	currently?	
	11	Α.	I'm not sure.
	12	Q.	Ballpark.
	13	Α.	Yeah, I don't remember. It's like
	14	under 30.	
09:51	15	Q.	Do any of them work on the LBRY,
	16	Inc.'s tech	nnology?
	17	Α.	Yes.
	18	Q.	And but they don't report to you?
	19	Α.	Yes.
09:51	20	Q.	The LBRY employees who work on
	21	technology	, do they report to somebody else?
	22	Α.	Yes.
	23	Q.	To whom do they report?
	24	Α.	To Jeremy.
09:51	25	Q.	Does everyone just report to Jeremy?

```
09:54
       1
          9:54 a.m. We are off the record.
       2
                               (At this time, a discussion
       3
                              was held off the record.)
       4
                     VIDEOGRAPHER: Time right now is
10:00
       5
          10:00 a.m. We are back on the record.
          BY MR. MOORES:
       6
       7
               Q. How many websites does LBRY, Inc.
       8
          maintain?
       9
               A.
                     I'm not sure exactly. At least
10:00 10
          three.
      11
               0.
                     What are those?
      12
                     LBRY.com, LBRY.tech, Odysee.com.
               A .
      13
          Yeah, there might be others.
                     I'd like to talk about those.
      14
               Q.
10:01 15
                     LBRY.com, what is the purpose of that
      16
          website?
      17
               A. To be the website for the company.
      18
          And the protocol.
      19
                     Does LBRY provide information to the
10:01 20
          public through LBRY.com?
      21
               Α.
                     Yes.
      22
                     Is that part of the purpose, to
      23
          provide information about LBRY to the public?
      2.4
               Α.
                   Yes.
10:01 25
               0.
                     What is LBRY.tech?
                                                                  21
```

10:06	1	how to cont	cribute, like API documentation.	
	2	Q.	What is an API?	
	3	Α.	Application programming interface.	
	4	Something 1	like that.	
10:06	5	Q.	In layman's terms, what is that?	
	6	Α.	It's a way for programs to talk to	
	7	each other		
	8	Q.	You identified another website called	
	9	Odysee.com		
10:07	10		What is that?	
	11	A .	That's an application.	
	12	Q.	A web-based application?	
	13	<b>A.</b>	Yes.	
	14	Q.	And is there somebody or people at	
10:07	15	LBRY who as	re primarily responsible for	
	16	Odysee.com	's maintenance?	
	17	Α.	I don't know.	
	18	Q.	Who do you think at LBRY would know?	
	19		MR. DIXON: Objection. Calls for	
10:07	20	speculation	ı.	
	21	Α.	Yeah, I I would have to guess	
	22	it's Ju	lian might know. If I was guessing.	
	23	Q.	Who is Julian?	
	24	Α.	Julian Chandra.	
10:08	25	Q.	And what does he do at LBRY?	
				24

```
10:23
       1
               Α.
                     That lots of people use it.
       2
               Q.
                     Anything else?
       3
                     I don't know.
               Α.
       4
                     You don't know because you don't
10:23
       5
          remember or --
                     Yeah, I don't remember. It was a
       6
       7
          long time ago.
       8
               0.
                     Currently at LBRY, who are the people
          that you work with most?
10:24 10
               Α.
                     Jeremy and some of the developers.
      11
               0.
                     Who are the developers?
                     Jack, Victor -- you want me to list
      12
               A .
      13
          all the developers at LBRY?
      14
               Q.
                     The ones you work with the most.
10:25 15
                     Roy. Mostly with them.
               A.
      16
                     What is Jack's last name?
               0.
      17
                     Robison.
               A .
      18
                     What is he working on?
               Q.
      19
                     He is working on the -- the hub.
               A .
10:25 20
               Q.
                     What's that?
      21
                     It's a server that lets -- a service
               A .
      22
          that lets people use LBRY without having a full
      23
          copy of the blockchain.
      24
               0.
                     Is there a hardware involved on the
10:25 25
          hub?
                                                                   35
```

```
10:25
      1
                     What do you mean?
               A.
       2
               Q.
                     Between software and hardware,
       3
          hardware being a server, a computer, some sort
          of apparatus.
10:26
                     Is -- does the hub use hardware or is
      5
       6
          it merely a piece of software?
       7
               A.
                    It's both.
                     So are there -- does the hub run on
       8
               Q.
          LBRY servers?
10:26 10
               Α.
                     Yes.
      11
                     Servers owned by LBRY, Inc.?
               0.
      12
                     Yes. It runs on other people's
               A .
          servers as well.
      13
                     What is Victor's last name?
      14
               Q.
10:26 15
               A .
                     Shyba.
      16
                     What is he working on?
               0.
      17
                     I think he's working on the -- the
               A .
      18
          DHD right now.
      19
                     What's the DHD?
               0.
10:26 20
               A.
                     Distributed hash table.
      21
                    And what does that do?
               Q.
      22
               A.
                     It lets you find peers to download
          content from.
      23
      24
               Q.
                     What's Roy's last name?
10:27 25
               A.
                     Li.
                                                                 36
```

```
10:27
       1
                     What is he working on?
               Q.
       2
               Α.
                     The blockchain.
       3
                     When you refer to it as the
               Q.
          blockchain, what do you mean by that?
10:27
      5
                     It's called LBCD.
               Α.
       6
                     Is that different than the protocol?
               Q.
       7
               A .
                     It's part of the protocol.
                     So LBCD, does that refer to a
       8
               Q.
       9
          repository?
10:28 10
               Α.
                     I quess, yes.
                     I mean, what is a repository?
      11
               0.
      12
                     It's a copy of the code.
               A .
      13
               Q.
                     Where does LBRY, Inc. keep its
          repositories?
      14
10:28 15
               Α.
                     On GitHub and on our computers.
      16
                     So Ray Li is working on --
               0.
      17
               A .
                     Roy.
      18
               Q.
                     Sorry.
      19
                     Roy lee is working on the blockchain
10:28 20
          otherwise known as LBCD?
      21
               Α.
                     Yes.
      22
               0.
                     What other roles besides CTO do you
          have at LBRY, Inc., if any?
      23
      2.4
                     Like official roles?
               Α.
10:28 25
               Q.
                     Yes.
                                                                  37
```

11:02	1	Q. And who when was th	e desktop
	2	application created?	
	3	A. I don't remember the e	xact date.
	4	Q. When was the mobile ap	plication
11:03	5	created?	
	6	A. Also don't know the ex	act date.
	7	Q. Who created the deskto	p application?
	8	A. Like which person?	
	9	Q. Well, let's go with di	d LBRY create
11:03	10	the desktop application?	
	11	A. Yes.	
	12	Q. Who works on the deskt	op application
	13	currently at LBRY?	
	14	A. Jessop.	
11:03	15	Q. How do you spell that?	
	16	J-E-S-S-O-P.	
	17	Q. Is that the first or 1	ast name?
	18	A. First name.	
	19	Q. What's the last name?	
11:03	20	A. Breth, B-R-E-T-H.	
	21	Q. Does anybody else work	on that
	22	desktop application with him?	
	23	A. Other people can make	changes to it.
	24	But he's in charge.	
11:03	25	Q. Do you ever make chang	es to the
			53
		I	

```
11:03
       1
          desktop application?
       2
               Α.
                      Yes.
                     And how do you do that?
       3
               Q.
                     I write code.
       4
               Α.
11:04
       5
                     What language is the code in?
               Q.
       6
               Α.
                      JavaScript.
       7
               Q.
                     And where is it saved?
                      It's on like a bunch of people's
       8
               Α.
       9
          computers.
11:04 10
                      Is the desktop application code saved
               Q.
      11
          on GitHub?
      12
                      It's there as well.
               Α.
      13
               0.
                      Is the version on people's
      14
          computer -- sorry.
11:04 15
                     Where is the master version saved?
      16
                     LBRY's master version is on GitHub.
               A.
                     And do you have to go to GitHub
      17
               Q.
      18
          itself in order to type in changes to the code?
      19
               A.
                     No.
11:04 20
               0.
                     How does that work that -- how do you
      21
          change the master version on GitHub for the
      22
          desktop application?
      23
                     I make the changes on my computer and
          then I push them to GitHub.
      24
11:05 25
                     If you can just explain what push
               Q.
                                                                   54
```

```
11:05
      1
         them to GitHub means.
       2
               A .
                     I copy them to GitHub. But like it
          happens automatically. Like I run a command and
       3
          they get copied to GitHub.
11:05
      5
                     Do you have to talk to anybody else
               Q.
       6
          at LBRY before you push those changes to GitHub?
      7
               A .
                     No.
       8
                     Does -- if Jessop is going to make a
               Q.
      9
          change to the desktop application, does he have
11:05 10
          to talk to anybody else at LBRY before he pushes
      11
          changes to GitHub?
      12
               A .
                     No.
      13
               0.
                     Do you have like editorial rights to
      14
          the master LBRY version of the desktop
11:05 15
          application on GitHub?
      16
                     What do you mean?
               A.
      17
               0.
                     So you can just edit it yourself, the
      18
          desktop application code, on GitHub?
      19
               A.
                     Yes.
11:06 20
               0.
                    You don't need to talk to anybody
      21
          else, you don't need to get approval from
      22
          anybody else to make that change?
      23
               A.
                     No.
                     And I think you are saying that
      24
               Q.
11:06 25
          Jessop Barth -- Berth --
                                                                 55
```

11:06	1	A. Breth.	
	2	Q. He doesn't need to talk to anybody	
	3	else at LBRY in order to make those changes on	
	4	the desktop application, correct?	
11:06	5	A. Yes.	
	6	Q. Who else at LBRY has the ability to	
	7	make changes to the desktop application code on	
	8	GitHub?	
	9	A. Anyone else.	
11:06	10	Q. Any LBRY employee can make changes to	
	11	the desktop application code on GitHub?	
	12	A. I believe so.	
	13	Q. And how long has that been the	
	14	operating procedure at LBRY, Inc.?	
11:07	15	A. I'm not sure.	
	16	Q. Has it always been that way for the	
	17	desktop application in your your memory?	
	18	A. As far as I remember, yes.	
	19	Q. Can anyone outside of LBRY make edits	
11:07	20	to LBRY's master version of the desktop	
	21	application code?	
	22	A. Yes.	
	23	Q. Who is that?	
	24	A. Anyone who is code.	
11:07	25	Q. So hypothetically speaking, if I	
			56

```
11:07
       1
          grabbed John's laptop, went to GitHub, I can
       2
          make changes to LBRY's master version of the
       3
          code for the desktop application right now?
       4
               Α.
                      Yes.
11:08
       5
                      And it would change whatever version
       6
          that somebody downloads of the LBRY's desktop
       7
          application?
       8
               Α.
                      No.
       9
               Q.
                      Why not?
11:08 10
                      It has to be merged first.
               Α.
      11
                      Who -- can I -- again, hypothetically
               Q.
      12
          speaking, can I merge code into the master
      13
          version of LBRY's desktop application?
      14
               Α.
                      No.
11:08 15
               Q.
                      Who can merge the code?
      16
                      For LBRY's copy?
               Α.
      17
               Q.
                      For the master version on GitHub,
      18
          yes.
      19
                      For LBRY's master version, it would
               Α.
11:08 20
          be --
      21
                     Correct. For LBRY's master version
      22
          on GitHub, who can merge the code for the
      23
          desktop application?
      24
               A .
                     People at LBRY.
11:08 25
               Q.
                     So people outside of LBRY can't merge
                                                                    57
```

```
11:08
      1
         the code for LBRY's master version?
       2
               A .
                     No. But they can make their own.
       3
                     Right. They can copy but -- because
               0.
       4
          it's open source, they can copy the code and
11:09
      5
          make their own desktop, that would be the -- the
          Dickson, you know, LBRY desktop, you know,
       7
          version?
       8
               A .
                     Right.
       9
               0.
                     Now, below -- is -- so with the
11:09 10
          mobile application, is that the same to be true,
      11
          that anyone at LBRY can change the LBRY's master
      12
          version of the mobile application and merge the
      13
          file, but no one outside of LBRY can do that?
      14
                     MR. DIXON: Objection to form.
11:09 15
               A.
                     I think so.
                     MR. DIXON: You can answer.
      16
      17
                    I -- I think so.
               A .
      18
                     Is it written down anywhere?
               Ο.
      19
                     I don't know.
               Α.
                     Was it somewhere in like GitHub that
11:09 20
               0.
      21
          says who has the ability to merge files?
      22
               Α.
                     Yes.
                     And is the rules in GitHub viewable
      23
          by the public?
      2.4
11:10 25
               Α.
                     I don't know.
                                                                  58
```

```
11:10
                     So you understand what I mean? Like
       1
               Q.
       2
          who can actually change LBRY's master version?
       3
          Is it observable by the public on who has those
       4
          -- those rights?
11:10
                     Yeah, I don't know.
       5
                     Do you know where it would be on
       6
               0.
       7
          GitHub if you needed to find that out?
       8
               Α.
                     No.
       9
                     Below the desktop/mobile app box,
11:10 10
          there's an arrow that points down to the --
      11
          another box which says, "SDK," and then in
          paren, "one per user," close paren.
      12
      13
                     Do you see that?
      14
               A .
                     Yes.
11:10 15
                     What is SDK?
               Q.
                     SDK stands for software development
      16
               A.
      17
          kit.
      18
                     What is this box here, on Exhibit 91,
               Q.
      19
          SDK supposed to symbolize?
11:11 20
               Α.
                     That's the code that we call the SDK.
      21
          That's running on your computer.
      22
               Q.
                     On the user's computer?
      23
                     Yes. LBRY user.
               A .
                     And what does the SDK software do?
      24
               0.
11:11 25
               Α.
                     It speaks to LBRY protocol and
                                                                  59
```

11.11	1	nartiginato	og in the notwork	
11:11			es in the network.	
	2	Q.	So when a user downloads the desktop	
	3		n, is the SDK bundled in that	
	4	download?		
11:11	5	A.	Yes.	
	6	Q.	And without the SDK, the desktop	
	7	application	n wouldn't be able to function?	
	8	A .	It would still do some things. But	
	9	it couldn't	t talk to the network, the LBRY	
11:12	10	network.		
	11	Q.	So LBRY's desktop application and	
	12	mobile appl	ication predominantly are for the	
	13	consumption	of videos; is that correct? What is	
	14	currently.		
11:12	15	Α.	Maybe.	
	16	Q.	Is it something	
	17	Α.	Sure. yes.	
	18	Q.	Something other than video?	
	19	Α.	Yeah. It's any content.	
11:13	20	Q.	Right.	
	21		But what is the most content that	
	22	those appli	cations can access at the moment?	
	23	Α.	I'm not sure.	
	24	Q.	So on the LBRY network, right, there	
11:13	25	are then	re's content that in theory publishers	
				60

```
11:14
          go back to the desktop, mobile app box here in
       1
       2
          front of you. And there's this arrow that
       3
          starts at the top right-hand corner of the box
       4
          and snakes all around. And then says, "Search"
11:14
          and comes around and points to a lighthouse
       5
       6
          search box on the far right-hand side.
       7
                     Do you see that?
       8
               Α.
                     Yes.
                      That arrow sort of snakes around.
       9
               Q.
11:15 10
                     What is Lighthouse search?
      11
               A .
                     Lighthouse is a server that provides
      12
          the search capability.
      13
               Q.
                     Who owns that server?
      14
               A .
                     Odysee.
11:15 15
                     Does the Lighthouse search server
               Q.
          also work for the desktop application?
      16
      17
               A.
                     Yes.
      18
                     And Odysee is a subsidiary -- is a --
               0.
      19
          is a company itself; is that right?
11:15 20
               Α.
                     Yes. I'm not sure.
      21
                      So Odysee is a part of LBRY; is that
               Q.
      22
          correct?
      23
                          I'm not sure, honestly.
               Α.
                     No.
      2.4
                     Have you heard of the expression
               Q.
11:16 25
          subsidiary?
                                                                   62
```

11:16	1	Α.	Yes.	
	2	Q.	Is Odysee a subsidiary of LBRY?	
	3	Α.	I don't know the like legal status.	
	4	Q.	So Lighthouse search is a server that	
11:16	5	provides a	search function; is that right?	
	6	Α.	Yes.	
	7	Q.	And how does it do that?	
	8	Α.	It uses software called	
	9	Elasticsear	cch, which is open search software,	
11:16	10	and there's	s an API, call it, you get search	
	11	results.		
	12	Q.	So there's software running on those	
	13	servers to	facilitate the search?	
	14	Α.	Yeah.	
11:17	15	Q.	So that would be sort of when you	
	16	have hardwa	are and software sort of working	
	17	together?		
	18	Α.	Right.	
	19	Q.	Who created Lighthouse?	
11:17	20	A.	LBRY.	
	21	Q.	Who works on Lighthouse now?	
	22	Α.	I don't know.	
	23	Q.	So back on the desktop mobile app	
	24	box, there	's another arrow that starts from the	
11:17	25	right-hand	side of the box that goes up and	
				63

```
11:26
       1
          that. It's an icon.
       2
                     What is the purpose of the icon?
       3
                     It differentiates that line from
               Α.
          other lines.
       4
11:26
                     So it's essentially just like
       5
       6
          creating a different color or something --
       7
               Α.
                     Yeah.
                     -- that differentiates them? Okay.
       8
               Q.
       9
                     What is the reflector cylinder?
11:26 10
              A.
                    Reflector is a server. It reflects
      11
          content.
      12
                    What does reflecting content mean
               Q.
      13
          within the concept of the LBRY network?
               A. It stores content that people can
      14
11:26 15
         download.
      16
                    So there's hardware involved in the
               Q.
          reflector --
      17
      18
               A.
                    Yes.
      19
                    -- servers?
               0.
11:27 20
               A.
                    Yes.
      21
                    And who owns those servers?
               Q.
      22
              A .
                    LBRY.
                    What's the purpose of reflecting
      23
               Q.
      24
          content?
                    To help people download it.
11:27 25
               A.
                                                                 70
```

11:27	1	Q. How does the reflector help people
	2	download it?
	3	A. They talk to LBRY protocol. And they
	4	download the content.
11:27	5	Q. Is that only for content that LBRY
	6	publishes?
	7	A. No. It's for any content.
	8	Q. Is that because it speeds up the
	9	download for users?
11:27	10	MR. DIXON: Objection as to form.
	11	Excuse me. Objection as to form.
	12	Q. All right. So the reflector, you
	13	said, it enables content download.
	14	Is one of the things it does, speed
11:28	15	up the ability of users to download content?
	16	A. Yes.
	17	Q. Coming out of the reflector is an
	17 18	
		Q. Coming out of the reflector is an
11:28	18 19	Q. Coming out of the reflector is an arrow coming out of a box saying called
11:28	18 19	Q. Coming out of the reflector is an arrow coming out of a box saying called "Video CDN."
11:28	18 19 20	Q. Coming out of the reflector is an arrow coming out of a box saying called "Video CDN."  What is video CDN?
11:28	18 19 20 21	Q. Coming out of the reflector is an arrow coming out of a box saying called "Video CDN."  What is video CDN?  A. CDN is content delivery network. So
11:28	18 19 20 21 22	Q. Coming out of the reflector is an arrow coming out of a box saying called "Video CDN."  What is video CDN?  A. CDN is content delivery network. So video content delivery network.
11:28 11:28	18 19 20 21 22 23 24	Q. Coming out of the reflector is an arrow coming out of a box saying called "Video CDN."  What is video CDN?  A. CDN is content delivery network. So video content delivery network.  Q. Is that software?

```
video CDN?
11:28
      1
       2
               A .
                     It's servers.
       3
                     And does LBRY own any servers that
               Q.
          are part of the video CDN?
       4
11:29
      5
               A.
                     Yes.
       6
                     MR. DIXON: Alex, could you try to
       7
          speak up a little bit if you can.
       8
                     THE WITNESS: Yes. Thanks for
       9
          reminding me.
11:29 10
               Q.
                     What's the purpose of the video CDN?
      11
               A.
                     To speed up video download.
      12
                     Is there software that is necessary
               Q.
      13
          to run the reflectors?
      14
               A .
                     Yes.
11:29 15
                     And who created that software?
               Q.
      16
               A.
                     LBRY.
                     Who works on the reflector software
      17
               0.
      18
          today?
      19
               Α.
                     I don't know.
11:29 20
               Q.
                     Is there anybody at LBRY that works
      21
          on that software?
      22
               Α.
                     I've -- I don't know.
      23
                     Have you made changes to the
      24
          reflector software yourself?
11:30 25
               Α.
                     Me personally, I think so.
                                                                  72
```

11:30	1	Q. Who created the video CDN softwa	re?
	2		
	3		are
	4	today at LBRY?	
11:30	5		
11.50	6	Q. All right. So coming out of the	SDK
	7	box, there's an arrow that points to a clou	
	8	bubble that says, "SDK peers."	J
11 00	9	Do you see that?	
11:30			
	11	~	
	12		ng
	13	the SDK.	
	14	Q. And then below that, there's an	arrow
11:31	15	that points to another bubble which is "DHT	• "
	16	In parens is "UDT," close parens.	
	17	Do you see that?	
	18	A. Yes.	
	19	Q. I think you said DHT was distrib	uted
11:31	20	hash what's the T stand for?	
	21	A. Table.	
	22	Q. Table.	
	23	What does the DHT do?	
	24	A. It helps you find peers to downl	oad
11:31	25	content from.	
			73

11:31	1	Q.	Is that software?	
	2	Α.	Yes.	
	3	Q.	Who created the DHT for the LBRY	
	4	network?		
11:31	5	A.	LBRY.	
	6	Q.	And who works on the DHT today? You	
	7	said it wa	s Victor; is that right?	
	8	A.	Yes.	
	9	Q.	Below the SDK box, there is another	
11:32	10	box an	arrow pointing to a box called "Hub."	
	11	And I thin	k you talked a little bit about the	
	12	hub before	hand. Jack Robinson is working on the	
	13	hub now?		
	14	A.	Robison. Yes.	
11:32	15	Q.	Robison.	
	16		Who created the hub?	
	17	A.	LBRY.	
	18	Q.	Is the hub requiring hardware in	
	19	addition t	o software?	
11:32	20	A.	Yes.	
	21	Q.	And does LBRY own sorry.	
	22		Is it a server?	
	23	Α.	Yes.	
	24	Q.	And does LBRY own the server upon	
11:32	25	which the	hub operates?	
				74

11:32	1	A. Some of them.	
	2	Q. What does the hub do again?	
	3	A. It lets the it lets you interact	
	4	with the blockchain without having a full copy	
11:33	5	of it.	
	6	Q. Now, there's an arrow to the left of	
	7	the hub box. Points to the hub box. And within	
	8	that box it says, "Elasticsearch."	
	9	Do you see that?	
11:33	10	A. Yes.	
	11	Q. What's that Elasticsearch for?	
	12	A. Also for search.	
	13	Q. Similar to the Lighthouse search?	
	14	A. Yes.	
11:33	15	Q. And so is there servers that LBRY	
	16	owns upon which the Elasticsearch operates for	
	17	the purposes of the hub?	
	18	A. Yes.	
	19	Q. So on the left side of the SDK, one	
11:33	20	per user box, there's "Segment/metabase	
	21	analytics."	
	22	Do you see that?	
	23	A. Yes.	
	24	Q. And what are segment/metabase	
11:33	25	analytics?	
			75

11:39	1	Q.	What is a blockchain node?	
	2	<b>A.</b>	It's the piece of software that	
	3	implements	the blockchain piece of the protocol.	
	4	Q.	Who created the blockchain node?	
11:40	5	Α.	A bunch of people.	
	6	Q.	Who are those?	
	7	Α.	I don't know all of them.	
	8	Q.	Who who is the the people that	
	9	contribute	d the most? At least we'll start with	
11:40	10	the people	at LBRY.	
	11		Who at LBRY contributed to the	
	12	blockchain	node's categorization?	
	13	Α.	Do you want like a list of everybody?	
	14	Q.	I mean at LBRY the created it.	
11:40	15	So at the 1	peginning.	
	16	Α.	No one at LBRY created it.	
	17	Q.	No one currently at LBRY?	
	18	Α.	No one currently at LBRY.	
	19	Q.	Were they at LBRY at the time they	
11:40	20	created it	?	
	21	Α.	No.	
	22	Q.	Talk about Jimmy Kiselak?	
	23	Α.	I wouldn't say Jimmy created it.	
	24	Q.	So who created it?	
11:41	25	Α.	I mean, like a ton of people	
				8

```
11:41
       1
          contributed to it. I don't know if there's like
       2
          one creator.
       3
                     And they were not at LBRY at the
               Q.
          time?
       4
11:41
               Α.
       5
                     No.
       6
               Q.
                     All right. So give me some names.
       7
                      Who -- who was for the creation of
          blockchain -- sorry. Let me -- when was the
       8
       9
          blockchain node created?
11:41 10
               Α.
                      I don't know.
      11
               Ο.
                     Would the blockchain node have to
      12
          have been created prior to the launch of
      13
          protocol?
               Α.
      14
                     Yes.
11:41 15
                     And when was launch of the protocol?
               Q.
      16
                      If I remember correctly, June 2016.
               Α.
                      So somebody would have had to have
      17
               0.
      18
          created blockchain node prior to June of 2016,
      19
          correct?
11:42 20
               Α.
                     Yes.
      21
                     Who works on the blockchain node
               Q.
      22
          today?
                     Roy. Roy Li.
      23
               A.
      24
               0.
                     Anyone else at LBRY?
11:42 25
               Α.
                     Not like primarily.
                                                                   81
```

11:42	1	Q.	Did you have a hand in the creation
	2	of blockch	ain node?
	3		MR. DIXON: Objection as to form.
	4	Q.	Did you contribute to the creation of
11:42	5	blockchain	node?
	6		Probably have two hands. Typing at
	7	the keyboa	rd, right. You are not a one-hand
	8	type perso	n? No.
	9	Α.	Um what's the question?
11:42	10	Q.	Sure.
	11		Did you contribute to the creation of
	12	the blockc	hain node?
	13	<b>A.</b>	Yes.
	14	Q.	Who did you work with on the creation
11:43	15	of blockch	ain node?
	16	Α.	Jimmy and Jeremy.
	17	Q.	All right. So I think I've covered
	18	most of th	is stuff on the left-hand side of this
	19	slide char	t. I want to go over to the Odysee
11:43	20	stack side	•
	21		And under "User," there's a box
	22	called "Br	owser."
	23		Do you see that?
	24	Α.	Yes.
11:43	25	Q.	What is the browser?

```
11:43
       1
               Α.
                     It's software that runs on your
       2
          device that lets you access the internet.
       3
               Ο.
                     And the browser was not something
          that LBRY created, correct?
       4
11:44
       5
               Α.
                     Correct.
                     So the browser is oftentimes Internet
       6
               0.
       7
          Explorer, Google Chrome, something like that?
       8
               Α.
                     Yes.
       9
                     Below that is the Odysee API, which I
11:44 10
          think we talked about. To the right is
          something called Postgres, P-O-S-T-G-R-E-S.
      11
      12
                     Do you see that?
      13
               A.
                     Yes.
                     What is that?
      14
               Q.
11:44 15
                     It's a relational database. Server
               A .
      16
          software.
      17
                     What does it do?
               Q.
      18
               A.
                     It stores data.
      19
                     What type of data?
               Q.
11:44 20
               A.
                     Whatever data you put in there.
      21
                     What is LBRY putting in Postgres?
               Q.
      22
               A.
                     Data that it needs to run the Odysee
      23
          service.
      24
                     Can you give me a couple of examples
               Q.
11:44 25
          of what that data is?
                                                                  83
```

11:45	1	A. Like I'm going to have to think	
	2	about it for a sec.	
	3	Like notifications sent to users or	
	4	like logins. Like the kind of things you'd	
11:45	5	need to to use Odysee.	
	6	Q. Use meaning the user would need to	
	7	use Odysee; is that correct?	
	8	A. Yes.	
	9	Q. As opposed to sort of the developer	
11:45	10	would need or is it both?	
	11	A. I'm not sure.	
	12	Q. Notifications, what are those?	
	13	A. When something happens that a user	
	14	might be interested in, Odysee's the	
11:46	15 application notifies them.		
	16	Q. Can you give me an example?	
	17	A. When a piece of content is published	
	18	by a creator you follow.	
	19	Q. Through what medium does the	
11:46	20	notification get sent?	
	21	A. I think it's e-mail or in the	
	22	application.	
	23	Q. Are notifications ever sent to	
	24	desktop application users?	
11:47	25	A. I'm not sure.	
			84

11:47	1	Q.	Are notifications sent to mobile	
	2	application	n users?	
	3	Α.	I'm not sure.	
	4	Q.	Who at LBRY created the Postgres?	
11:47	5	A.	No one.	
	6	Q.	Is there a server that's involved in	
	7	Postgres where all the data is stored?		
	8	<b>A.</b>	Yes.	
	9	Q.	Who owns the server?	
11:47	10	A.	Odysee.	
	11	Q.	And there's software that operates	
	12	that server; is that right?		
	13	A.	Yes.	
	14	Q.	Like these notifications are probably	
11:47	15	automated,	right?	
	16	A.	Yes.	
	17	Q.	It's not like somebody is actually	
	18	typing the	m out?	
	19	A.	Yes. Yes.	
11:47	20	Q.	Who developed the software that runs	
	21	on the Pos	tgres service?	
	22	A.	The open source community. There's	
	23	probably 1	ike thousands of developers.	
	24	Q.	So no one at LBRY?	
11:48	25	A.	Right.	
				85

11:51	1	Α.	I'm not sure.
	2	Q.	Who created the hub software for the
	3	Odysee stad	ck?
	4	<b>A</b> .	LBRY.
11:51	5	Q.	And does Jack Robison run or maintain
	6	the hub so	ftware for the Odysee stack?
	7	Α.	No.
	8	Q.	Who does that?
	9	Α.	I'm not sure.
11:51	10	Q.	What day-to-day role do you have in
	11	the Odysee	stack?
	12	Α.	None.
	13	Q.	And when did that start?
	14	Α.	I'm not sure what you mean.
11:52	15	Q.	When did you cease having a
	16	day-to-day	role in Odysee?
	17	Α.	I've I never had a day-to-day role
	18	at Odysee.	
	19	Q.	So this Odysee stack, have you made
11:52	20	changes to	any of the software on the Odysee
	21	stack?	
	22	Α.	Yeah.
	23	Q.	What have you made changes to?
	24	Α.	The SDK. And the blockchain.
11:52	25	Q.	The blockchain noted at the bottom of
			88

```
11:52
       1
          the stack?
       2
               Α.
                      Yes.
       3
                      Anything else?
               Ο.
                      I don't remember.
       4
               Α.
11:52
       5
                      When was the last time you made a
               Ο.
       6
          change to any of the software on the Odysee
       7
          stack?
                      I don't remember.
       8
               Α.
       9
               Q.
                      What part of the Odysee stack
11:53 10
          software is not open source?
                     I don't know.
      11
               A.
      12
                     Is some of it not open source?
               0.
      13
               A.
                     Yes.
      14
               Q.
                      You just don't know what part of it
11:53 15
          is?
      16
                      Yeah, I don't know which is which.
               Α.
      17
               Q.
                     The hubs on the Odysee stack, they
      18
          run on servers; is that right?
      19
               A.
                     Yes.
11:53 20
               Q.
                     And who owns those servers?
      21
                     For the Odysee stack?
               A .
      22
               Q.
                     Correct.
      23
               Α.
                     Odysee.
      24
                     What is the software code Go?
               Q.
11:54 25
               Α.
                     What do you mean? Oh --
                                                                    89
```

11:54	1	Q. Software language, I should say.	
	2	A. Yeah, Go is a program language.	
	3	Q. And what efforts are you engaged in	
	4	in transferring any of the LBRY stacks software	
11:54	5	code to Go?	
	6	A. I made the decision that we should do	
	7	that.	
	8	Q. When did you make the decision?	
	9	A. A while ago.	
11:54	10	Q. Is that more than a year ago?	
	11	A. I'm not sure.	
	12	Q. Why did you make the decision to	
	13	change the software code to Go?	
	14	A. I thought it would be better that	
11:55	15	way.	
	16	Q. Why would it be better?	
	17	A. It's easier to develop it.	
	18	Q. Who drafted Exhibit number 91, the	
	19	text of it?	
11:55	20	A. I'm not 100 percent sure.	
	21	Q. Who did you provide the diagram to	
	22	for the purposes of the Exhibit number 91?	
	23	A. I shared it with the whole company.	
	24	Q. Did someone ask you to create this	
11:56	25	diagram?	
			90

12:16	1	Α.	Maybe.	
	2	Q.	What do you mean by "maybe"?	
	3	Α.	Yeah. I think it's good to know what	
	4	the mission	n of the company is.	
12:17	5	Q.	So below the header "Ecosystem	
	6	Overview,"	about midway down the page, there's	
	7	these circl	Les. And on the left, there's one	
	8	that says,	"ChainQuery."	
	9		What is that?	
12:17	10	<b>A</b> .	It's a service that lets you query	
	11	blockchain	data.	
	12	Q.	And who runs that service?	
	13	Α.	Anyone can run it.	
	14	Q.	Like, is it like a company operates	
12:17	15	this service	ce or how is it	
	16	Α.	It's it's open source. Anyone can	
	17	run it.		
	18	Q.	So LBRY copied the software and	
19		figured out	how to apply to LBRY blockchain?	
12:17	20		MR. DIXON: Objection as the form.	
	21	Α.	Yeah, I'm not sure. Could you	
	22	rephrase th	nat?	
	23	Q.	Sure. Sure.	
	24		How did LBRY come to use ChainQuery?	
12:18	25	<b>A.</b>	LBRY wrote ChainQuery.	
				94

12:18	1	Q.	And who wrote it?	
	2	A.	I think Mark Beamer wrote it.	
	3	Q.	Is Mark Beamer still at LBRY?	
	4	<b>A.</b>	He's at Odysee.	
12:18	5	Q.	And when was ChainQuery first	
	6	created?		
	7	A.	I don't remember.	
	8	Q.	Is it more than two years ago?	
	9	Α.	Maybe.	
12:19	10	Q.	Who would know? Besides maybe Mark?	
	11	Α.	You can look on GitHub.	
	12	Q.	So ChainQuery is saved on GitHub?	
	13	Α.	The code for ChainQuery is saved on	
	14	GitHub.		
12:19	15	Q.	And on GitHub, it will talk about	
	16	when a cer	tain code was drafted or was	
	17	created?		
	18	Α.	Yes.	
	19	Q.	And then it will also indicate when	
12:19	20	edits were	made?	
	21	Α.	Yes.	
	22	Q.	What's on the right-hand side	
	23	there's "W	allet server."	
	24		Do you see that?	
12:19	25	Α.	Yes.	
				95

12:21	1	Α.	Yes.	
	2	Q.	When was the hub created?	
	3	Α.	Sometime in the last two years.	
	4	Q.	When was the wallet server created?	
12:21	5	Α.	Before that.	
	6	Q.	Who created the wallet server?	
	7	Α.	A bunch of people.	
	8	Q.	At LBRY?	
	9	Α.	Some of them are at LBRY.	
12:22	10	Q.	So then, at the time that it was	
	11	created, we	ere the people who created the wallet	
	12	server at 3	LBRY?	
	13	A.	Yes.	
	14	Q.	What does the wallet server do?	
12:22	15	A.	It lets you interact with the	
	16	blockchain	without having a full copy.	
	17	Q.	Why is it called wallet?	
	18	Α.	Because there's a thing called a	
	19	wallet tha	t it mostly works with.	
12:22	20	Q.	So we talked about the wallet sync	
	21	beforehand	•	
	22		How does the wallet sync interact	
	23	with the wa	allet server?	
	24	Α.	It doesn't.	
12:23	25	Q.	Does the wallet server have a role in	
				97

```
12:30
          sort of fields or forms on the website of LBRY
       1
       2
          tech and the -- Exhibit number 92 is trying to
       3
          capture all three of them.
       4
                     So that's why you see blockchain,
12:31
       5
          data network and applications. And each one of
       6
          those is expanded in succession. So I'm
       7
          directing your attention to the last -- front
       8
          side of the last page of Exhibit number 92,
       9
          where it has expanded data network -- I'm sorry,
12:31 10
          expanded applications.
      11
                     Do you see that?
      12
               Α.
                     Yes.
      13
                     So there are three applications that
               0.
      14
          are listed here. Android, desktop and spe.ch,
12:31 15
          S-P-E, dot, C-H.
      16
                     Do you see that?
      17
               A .
                     Yes.
      18
                     I don't think we've talked about
               0.
      19
          spe.ch yet today.
12:31 20
                     What is that?
      21
                     It is a -- or it was. It doesn't
               A.
      22
          exist anymore. But it was a website where
      23
          people could upload images that would go to the
      24
          LBRY network.
12:32 25
                     So it was a web application?
               Q.
                                                                 102
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12:32	1	<b>A.</b>	Yes.	
12.02	2	Q.	And when did it cease to exist?	
	3	Α.	I don't remember.	
	4	Q.	Why did it cease to exist?	
12:32	5	Α.	Because it was replaced.	
12.52	6		-	
	7	Q.	What was it replaced by?	
	·	Α.	Either LBRY TV or Odysee.	
	8	Q.	So was spe.ch the sort of original	
	9		ation for the LBRY network?	
12:33	10	Α.	What do you mean by "original"?	
	11	Q.	Preceded all other web applications	
	12	for the LB	RY network.	
	13	Α.	Yes.	
	14	Q.	Whose decision was it to end spe.ch?	
12:33	15	A.	I'm not sure.	
	16	Q.	Was it your decision to end spe.ch?	
	17	A.	No.	
	18	Q.	Was it Jeremy Kauffman's decision to	
	19	end spe.ch	?	
12:33	20	A.	Maybe.	
	21	Q.	Well, who else is there? Like who	
	22	else would	except LBRY, who has the authority	
	23	to end an	application?	
	24	Α.	It would be Julian.	
12:34	25	Q.	So when was spe.ch ended, then?	
				103

12:44	1	UptimeRobo	t's check.	
	2	Q.	And what does the red bar mean?	
	3	Α.	I think it means that it didn't	
	4	respond.		
12:44	5	Q.	Do you know what the orange bar	
	6	means?		
	7	A.	No.	
	8	Q.	Or the faded or light green bar	
	9	means?		
12:44	10	A.	I'm not sure.	
	11	Q.	So the second service listed is	
	12	ChainQuery	, Claim Tree sync.	
	13		Do you see that?	
	14	A.	Yes.	
12:44	15	Q.	What is the Claim Tree sync?	
	16	A.	I'm not sure.	
	17	Q.	Next one is Explorer.	
	18		You see that?	
	19	A.	Yes.	
12:45	20	Q.	What is Explorer?	
	21	<b>A.</b>	It's a web app that lets people see	
	22	blockchain	information.	
	23	Q.	And who maintains that website, the	
	24	Explorer w	ebsite?	
12:45	25	A.	What do you mean, maintains?	
				110

12:55	1	MR. DIXON: Objection as to form.	
	2	A. What do you mean, reflect content?	
	3		
		Q. Well, what is what's the reflector	
	4	cylinder do on Exhibit number 91?	
12:55	5	A. It accepts content that people choose	
	6	to send to it.	
	7	Q. Are there servers owned by LBRY that	
	8	are exist in Asia that host content?	
	9	MR. DIXON: Objection as to form.	
12:56	10	A. I'm not sure.	
	11	Q. Who would know the answer to that	
	12	question? Who is in charge of the technology at	
	13	LBRY?	
	14	MR. DIXON: Objection as to form.	
12:56	15	A. Who is in charge of the technology at	
	16	LBRY?	
	17	Q. Yeah.	
	18	A. Me.	
	19	Q. So where are the servers that LBRY	
12:56	20	owns? Where are they located?	
	21	MR. DIXON: Objection as to form.	
	22	A. All over the world.	
	23	Q. And are there any servers in Asia	
	24	that host content that are owned by LBRY?	
12:57		MR. DIXON: Objection as to form.	
,		118	

12:57	1	A.	There's Odysee servers that host	
	2	content.		
	3	Q.	That are owned by Odysee?	
	4	<b>A</b> .	Yes.	
12:57	5	Q.	And are located in Asia?	
	6	A.	What do you mean by "host content"?	
	7	Q.	So back on Exhibit number 91, we have	
	8	the reflec	tor, right? What does the reflector	
	9	do?		
12:58	10	Α.	It accepts content that people choose	
	11	to send to	it.	
	12	Q.	So what does "accepts content" mean?	
	13	Α.	When you send it content, it it	
	14	accepts it		
12:58	15	Q.	What does it do with it?	
	16	Α.	It stores it.	
	17	Q.	For what purpose?	
	18	Α.	For others to download it.	
	19	Q.	Are there servers owned by Odysee	
12:58	20	located in	Asia that accept content and store it	
	21	for other	people to download?	
	22		MR. DIXON: Objection as to form.	
	23	Α.	I don't think so.	
	24	Q.	And what's the basis of your	
12:59	25	understand	ing that there are no servers of that	
				119

01:00	1	Q.	Can you give me an example of a way	
	2	in which y	ou do use it?	
	3	<b>A.</b>	To make content available for others	
	4	to downloa	d.	
01:01	5	Q.	And does LBRY host content?	
	6		MR. DIXON: Objection as to form.	
	7	A.	Servers host content.	
	8	Q.	LBRY servers host content?	
	9	<b>A.</b>	Some of them.	
01:01	10	Q.	Approximately how much content in	
	11	terms of m	emories do LBRY servers host?	
	12	Α.	In terms of memories?	
	13	Q.	Yeah. Like bytes.	
	14	Α.	I don't know.	
01:01	15	Q.	In terms of the number of videos, how	
	16	much conte	nt do LBRY servers host?	
	17		MR. DIXON: Objection as to form.	
	18	Α.	I I don't know.	
	19	Q.	How would I if you had to answer	
01:02	20	that quest	ion, how would you do it?	
	21		MR. DIXON: Objection as to form.	
	22	Α.	I would have to check. I'd have to	
	23	look.		
	24	Q.	Where would you look?	
01:02	25	Α.	I'd have to look at all the servers	
				121

```
01:55
       1
          LIT-E-0002498. It is dated May 12, 2016.
       2
                     Do you have Exhibit number 94 in
       3
          front of you?
       4
               Α.
                    Yes.
01:55
                     All right. In Exhibit 94, Tipping in
       5
          LBC, there's a reference to a new team member,
       6
       7
          Alex Grin.
       8
                     Is that you?
       9
               Α.
                     Yes. Probably.
01:55 10
                     And so it says that you had set up an
               Q.
      11
          LBC tip bot on LBRY's Slack.
      12
                     Do you see that?
      13
               Α.
                     Mm-hmm.
      14
               Q.
                     Did you, in fact, set up an LBC tip
01:56 15
          bot on LBRY's Slack?
      16
                     I don't remember doing it. But
               Α.
      17
          probably, yes.
      18
                     All right. Well, what is a tip bot?
               0.
      19
                     A tip bot is a program that people
               A.
01:56 20
          can use to send each other tips.
      21
                     And specifically in this instance, is
               Q.
      22
          it tips in LBC?
      23
               A.
                     Yes.
                     And LBC is LBRY credit?
      24
               0.
01:56 25
               A.
                     Yes.
                                                                  130
```

01:56	1	Q. And sending them on LBRY's Slack,	
	2	what is LBRY's Slack?	
	3	A. It's a chat program we use.	
	4	Q. And can someone actually send an LBC	
01:56	5		
01:36		through Slack?	
	6	A. No.	
	7	Q. How does it work?	
	8	A. You send a message asking the tip bot	
	9	to send a person a tip. And then the bot does	
01:56	10	it like on the blockchain.	
	11	Q. Was this set up so that LBRY could	
	12	send LBC to individuals?	
	13	MR. DIXON: Objection as to form.	
	14	A. Yes.	
01:57	15	Q. Did the tip bot allow non-LBRY	
	16	persons to send LBC to LBRY's Slack?	
	17	MR. DIXON: Objection as to form.	
	18	A. I don't remember what restrictions	
	19	there were.	
01:57	20	Q. Why did you set up or why was the	
	21	LBC tip bot set up?	
	22	A. Um I don't know the exact reason.	
	23	Q. What's one of the reasons, if if	
	24	there are more than one?	
01:58	25	A. It might have been because it's fun.	
			131

```
want to do work on several issues at once in the
02:16
       1
       2
          same area.
       3
               0.
                     So it was more efficient if you sort
       4
          of grouped them together for the development
02:16
          work to fix them?
       5
                     That's -- yeah, one example. Yeah.
       6
               Α.
       7
                               (Exhibit 96 was marked for
                              identification.)
       8
       9
                     Sir, you've been handed what has been
               Q.
02:17 10
          marked as Exhibit number 96. It is a one-page
      11
          document front and back. It begins on Bates
      12
          number SEC-LBRY LIT-E-0005102. It's entitled
      13
          "HF1807: A hard fork on July 9, 2018."
      14
                     Do you recognize Exhibit number 96?
02:17 15
               Α.
                     Yes.
      16
               0.
                     What is it?
                     It's a blog post that I wrote.
      17
               A .
      18
               Q.
                     Where was it posted?
      19
                     On LBRY's website.
               A .
02:18 20
                     Was it posted anywhere else?
               Q.
      21
                     I don't remember. It could have
               A .
      22
          been.
      23
                     Does LBRY maintain a website
               Q.
          LBRY.ihope?
      24
02:18 25
               Α.
                     Yes.
                                                                 144
```

```
02:18
      1
                     And was that discontinued at some
               Q.
       2
          point?
       3
               A.
                     Yes.
       4
               Q.
                     When was that?
02:18
      5
                     I don't remember the date.
               Α.
       6
                     Why was it discontinued?
               Q.
       7
               Α.
                     We switched to LBRY.com.
       8
               Q.
                     Why was that?
       9
                     We liked it better.
               Α.
02:18 10
               Q.
                     Whose decision was that?
      11
               Α.
                     I think it was Jeremy's.
      12
                     So what is an HF1807?
               Q.
      13
               Α.
                     A name.
                     What does the HF stand for?
      14
               Q.
02:19 15
                     Hard fork.
               Α.
      16
                     What does the number 1807 refer to?
               0.
      17
                     The date.
               A.
      18
                     And so the post was originally
               Q.
          June 5, 2018; is that right?
      19
02:19 20
               Α.
                     Seems right from this.
      21
                     And then there was a couple of
               Q.
          updates?
      22
      23
               Α.
                     That's what it looks like.
      24
               0.
                     Was it -- this post, how -- sorry.
02:19 25
                     Would LBRY promote its posts in any
                                                                 145
```

```
02:19
      1
          other format other than posting on its website?
       2
                     MR. DIXON: Objection as to form.
       3
               A.
                     We -- we might post them to Twitter.
       4
               Q.
                     What about Facebook?
02:20
      5
                     Yeah, probably.
               A.
       6
                     Would you post links in any Discord
               Q.
       7
          channel?
       8
               A .
                     It's possible.
       9
               Q.
                     Would you post a link to a post about
02:20 10
          hard forks on your Slack channel?
      11
               Α.
                     Probably.
      12
                     So this post, why did you make this
               Q.
      13
          post?
                     To let people know that this is
      14
               A .
02:20 15
          something we were proposing.
      16
                     "This" being the hard fork?
               Q.
      17
               Α.
                     Yes.
      18
                     What is a hard fork?
               Q.
      19
                     It's when there's a proposed change
               A.
02:20 20
          to the blockchain consensus rule.
      21
                     Is that ultimately a code change to a
               Q.
      22
          repository?
      23
                     What do you mean, ultimately?
               A .
      24
               Q.
                     Sure.
02:21 25
                     If there is a change to the consensus
                                                                 146
```

```
02:21
      1
          rules, does that represent a change in computer
          code for the protocol?
       3
                     MR. DIXON: Objection as to form.
       4
               A .
                     That's -- that's part of it.
02:21
      5
                     What else is part of it?
               Q.
       6
               A .
                     People running that code.
       7
               Q.
                     What do you mean by "running"?
       8
               A .
                     Running to -- like execute it, like
          the computer executing the code.
02:22 10
                     And this HF1807 was proposed by LBRY;
               Q.
      11
          is that correct?
      12
               Α.
                     Yes.
      13
               Q.
                     And did LBRY draft the code changes?
      14
                     MR. DIXON: Objection as to form.
02:22 15
               Α.
                     No.
                     Who did?
      16
               Q.
                      I think it was -- I don't remember
      17
               Α.
      18
          exactly who wrote this.
      19
                     What did HF1807, the hard fork, do?
               0.
02:23 20
               Α.
                      I don't remember. But I can read
      21
          this.
      22
               Q.
                     Sure. See if it refreshes your
          recollection.
      23
      2.4
                      It extended how long claims are valid
               Α.
02:23 25
          for before they expire.
                                                                  147
```

```
02:23
       1
                      Why was LBRY proposing this change?
               Q.
       2
               Α.
                      We thought it was a good idea for the
       3
          protocol.
       4
               Q.
                     Why was it a good idea for the
02:23
       5
          protocol?
                     We didn't think it made sense for
       6
       7
          claims to expire.
                     Under "What's changing," in the
       8
               Q.
       9
          fourth line, it says, "Any claims that expire
02:23 10
          before the fork takes effect will stay expired."
      11
                      Do you see that?
      12
               Α.
                     Mm-hmm.
      13
                      It says, "We will republish them
               0.
      14
          manually to preserve access to that content."
02:23 15
                      Do you see that?
      16
               Α.
                     Yes.
                     The "we," is that LBRY?
      17
               0.
      18
                      I think so.
               Α.
      19
                     Down at the bottom, there's a --
               0.
02:24 20
          right above "Fork details," it says, "We will
      21
          post updates about this fork to this page. If
      22
          you want to be notified of news about this fork
      23
          and future forks, please join the fork e-mailing
      24
          list."
02:24 25
                     Do you see that?
                                                                  148
```

02:24	1	<b>A.</b>	Yes.	
	2	Q.	Who operated the fork mailing list?	
	3	A.	LBRY.	
	4	Q.	There's a reference above that too,	
02:24	5	the releas	es page.	
	6		Do you see that?	
	7	Α.	Yes.	
	8	Q.	What's that?	
	9	Α.	It's a page where you can get a	
02:24	10	compiled v	ersion of the code.	
	11	Q.	Is that on LBRY's website?	
	12	Α.	I don't remember.	
	13	Q.	How many hard forks have there been,	
	13	2.		
	14		Y blockchain?	
02:25	14			
	14	to the LBR	Y blockchain?	
	14 15	to the LBR	Y blockchain?  I'm not sure.	
	14 15 16	to the LBR A. Q.	<pre>Y blockchain?  I'm not sure.  Is that more than ten?</pre>	
	14 15 16 17	to the LBR A. Q. A.	<pre>Y blockchain? I'm not sure. Is that more than ten? No.</pre>	
02:25	14 15 16 17	to the LBR  A.  Q.  A.  Q.	<pre>Y blockchain? I'm not sure. Is that more than ten? No. More than five?</pre>	
02:25	14 15 16 17 18	to the LBR  A.  Q.  A.  Q.  A.	<pre>I'm not sure.  Is that more than ten?  No.  More than five?  I'm not sure.</pre>	
02:25	14 15 16 17 18 19	A. Q. A. Q. A. Q. A.	<pre>I'm not sure.  Is that more than ten?  No.  More than five?  I'm not sure.</pre>	
02:25	14 15 16 17 18 19 20 21	A. Q. A. Q. A. Q. A. Q. less?	<pre>I'm not sure. Is that more than ten? No. More than five? I'm not sure. You are pretty confident it's ten or</pre>	
02:25	14 15 16 17 18 19 20 21 22	A. Q. A. Q. A. Q. A. A. A.	<pre>Y blockchain? I'm not sure. Is that more than ten? No. More than five? I'm not sure. You are pretty confident it's ten or</pre> Yeah.	
02:25	14 15 16 17 18 19 20 21 22 23 24	A. Q. A. Q. A. Q. A. A. A.	<pre>Y blockchain? I'm not sure. Is that more than ten? No. More than five? I'm not sure. You are pretty confident it's ten or Yeah. Is a hard fork significant?</pre>	

02:27	1	Q.	Is a hard fork significant to you?	
	2		MR. DIXON: Objection as to form.	
	3	<b>A</b> .	Yes.	
	4	Q.	Now, are all changes to the	
02:27	5	blockchain	code become a hard fork?	
	6	Α.	No.	
	7	Q.	Are there soft forks?	
	8	Α.	Yes.	
	9	Q.	What is a soft fork?	
02:27	10	Α.	It's a fork where the new rules are	
	11	backwards o	compatible.	
	12	Q.	What does that mean?	
	13	Α.	If you are running a version that	
	14	didn't acce	ept the fork, it still works. It's	
02:28	15	sorry, it's	s still part of the same chain.	
	16	Q.	And has there been soft forks to the	
	17	LBRY block	chain?	
	18		MR. DIXON: Objection as to form.	
	19	Α.	I don't remember.	
02:28	20	Q.	Just please bear with me on these	
	21	type of que	estions.	
	22		So the blockchain was launched in	
	23	about June	of 2016, correct?	
	24	Α.	Yes.	
02:28	25	Q.	There have been less than ten hard	
				151

```
02:41
       1
          LBRY's master copy of the blockchain code?
       2
                     MR. DIXON: Objection as to form.
       3
               Α.
                      Yes.
       4
                      So they could merge the files in
02:41
       5
          LBRY's master copy?
       6
               Α.
                      Yes.
       7
               0.
                     And that person was at LBRY at the
       8
          time?
       9
               Α.
                     Yes.
02:41 10
                      So, has anyone found a bug in LBRY's
      11
          blockchain code and brought it to your attention
      12
          that was not at LBRY?
      13
               Α.
                     Maybe. I don't remember a specific.
      14
                     Above the header "Fork Details,"
02:42 15
          there's two sort of paragraphs above that, it
      16
          says, "If you have published content to LBRY,
      17
          there's a very small chance that the fork will
      18
          cause your claims to experience more competition
      19
          and then they stop being the highest amount
02:42 20
          claims for their name. This effect less than
      21
          0.2 percent of claims," and then it says,
          "(until the 1,000 out of 640,000)."
      22
      23
                      Do you see that?
      24
               Α.
                     Yes.
02:42 25
                     What is a claim?
               Q.
                                                                  159
```

```
02:42
      1
              A.
                    A claim is a record in the
       2
          blockchain.
       3
              0.
                    What does the record signify?
                    A piece of published content.
       4
              A .
02:42
      5
                    For every published content, is there
              Q.
       6
          a claim?
      7
              A .
                    Yes.
                    And for every claim, there's a
      8
              Q.
          published content?
02:43 10
              Α.
                     No.
      11
                    When are there claims without
              Q.
      12
          published content?
     13
              A.
                     When someone makes one that way.
                    So a claim is as to what? What are
     14
              Q.
02:43 15
         people claiming?
      16
                     What do you mean?
               A.
     17
                    Well, I'm just looking at the word
              0.
      18
          claim like it's somebody claims something,
      19
          right.
02:43 20
              A .
                    Oh.
                    So I don't know if this is used in
      21
              0.
          such a fashion, that it is somebody who is
      22
          claiming something.
      23
      24
                     Is that how the word is used?
02:43 25
              A.
                    Yes.
                                                                160
```

```
02:43
                    So what is someone claiming when they
      1
              Q.
          make a claim?
       3
              A.
                    A name.
                    A name for content?
       4
              Q.
02:44
      5
              A.
                    Yes.
       6
                    So someone can actually claim a name
              Q.
      7
          but not publish content, correct?
       8
              A .
                    Yes.
      9
                    But somebody can't publish content
              Q.
02:44 10
         without claiming a name for that content?
               Α.
      11
                    Yes.
      12
                    What is the minimum -- are claims
               0.
     13
          made in LBC?
     14
              A .
                    Yes.
02:44 15
                    Can they be made in anything other
              Q.
      16
          than LBC?
     17
              A .
                    No.
      18
                    What is the minimum amount of LBC
              0.
      19
          needed to make a claim?
02:44 20
              A.
                    I don't know.
      21
                    Is there a maximum amount of LBC that
              Q.
      22
          can be used to make a claim?
      23
              A.
                    Yes.
      24
              Q.
                    What is that?
02:44 25
               A .
                    I don't know.
                                                                161
```

```
02:46
       1
          October 30, 2019."
       2
                      Do you see that?
       3
               Α.
                     Yes.
       4
                     And this is a post that you made on
02:47
       5
          or about October 3, 2019, correct?
       6
               Α.
                      Yes.
       7
               0.
                      Why are you making this announcement?
       8
               Α.
                      To let people know about a proposed
       9
          hard fork.
02:47 10
               Q.
                     Did any proposed hard fork -- sorry.
      11
                     Did any hard fork proposed by LBRY
          not get adopted by the network?
      12
      13
                     MR. DIXON: Objection as to form.
      14
               A .
                     I can't think of one.
02:47 15
               Q.
                     Who else besides LBRY proposed hard
      16
          forks to the LBRY blockchain, if anyone?
      17
                     I can't think of one.
               A .
      18
               0.
                      I'm not going to ask you about Merkle
      19
          tree crews (phonetic). We can skip over that.
02:48 20
                      Let's get down to about the middle of
          the page, where there's -- it begins "HF1910.
      21
      22
          We'll activate on the main net at height
      23
          658300."
      2.4
                      Do you see that?
02:48 25
               Α.
                      Yes.
                                                                  163
```

03:02	1	LBRY stack and the desktop application is under	
	2	the LBRY stack, correct?	
	3	A. Yes.	
	4	Q. Does the YouTube Sync program also	
03:02	5	sync content to LBRY?	
00.02	6	A. Yes.	
	7	Q. I mean, essentially, it syncs it to	
	8	the LBRY network, right, not specifically to	
	9	anything that is Odysee?	
03:02		A. Yes.	
	11	Q. And can you tell me mechanically, as	
	12	much as possible, in layman's term, how the	
	13	YouTube Sync programs works? How does it if	
	14	John, for example, has a great YouTube channel,	
03:03	15	how does it get from YouTube onto the LBRY	
	16	network? What does John have to do?	
	17	MR. DIXON: Objection as to form.	
	18	A. He has to go to the YouTube Sync page	
	19	and sign up for the program.	
03:03	20	Q. What happens after he signs up for	
	21	the program?	
	22	A. The YouTube Sync system downloads his	
	23	content and publishes it to LBRY.	
	24	Q. YouTube Sync program downloads the	
03:03	25	content, is that what you said?	
			172

```
03:03
       1
               A.
                     YouTube Sync system.
       2
               Q.
                     YouTube Sync system.
       3
                     What is the YouTube Sync system?
                     It's a set of servers that do this.
       4
               A .
      5
03:04
                     Running software on them?
               Q.
       6
               A .
                     Yes.
      7
               Q.
                     So the servers download the content
      8
          from YouTube servers, correct?
      9
               Α.
                     Yes.
03:04 10
                     And then make it -- and then publish
               Q.
      11
          that content to the LBRY network, correct.
      12
               A .
                     Yes.
      13
               0.
                    So the blockchain doesn't actually
      14
          host content, correct?
03:04 15
               Α.
                     Yes.
      16
                     MR. DIXON: Objection as to form.
      17
                     Because it's not actually stored on
               Q.
      18
          the blockchain, it's not on the distributed
      19
          ledger on the blockchain, correct?
03:04 20
               A .
                     That's correct.
      21
                    It sort of tells and maps out where
      22
          to get the content and the rules by which
      23
          somebody can access the content, correct?
      24
                     MR. DIXON: Objection as to form.
03:04 25
               A.
                     Roughly.
                                                                173
```

03:05	1	Q. So the YouTube Sync systems servers	
	2	are owned by LBRY; is that correct?	
	3	A. Odysee.	
	4	Q. Today they're owned by Odysee?	
03:05	5	A. Yes.	
	6	Q. And previously, they were owned by	
	7	LBRY?	
	8	A. Yes.	
	9	Q. So there was a sort of an asset	
03:05	10	transfer of servers, at least at some point,	
	11	within the last year?	
	12	MR. DIXON: Objection as to form.	
	13	A. What's an asset transfer?	
	14	Q. The ownership of the servers for the	
03:05	15	YouTube Sync system, transferred from LBRY to	
	16	Odysee at some point in the last year?	
	17	A. Yes.	
	18	MR. DIXON: Objection as to form.	
	19	Q. Why was that done?	
03:05	20	A. It made sense for Odysee to do this.	
	21	Q. To own the servers?	
	22	A. Yes.	
	23	Q. Why did it make sense?	
	24	A. It fits better with what Odysee is	
03:06	25	doing.	
			174

03:14	1	in terms of features for a video watching	
	2	application?	
	3	A. I think that there's no one feature	
	4	that's centralized or not. It's it's a	
03:14	5	spectrum. It's not like this or not.	
	6	Q. Would you agree that Odysee has	
	7	centralized features?	
	8	A. Yes.	
	9	Q. What are some of those centralized	
03:14		features?	
	11	A. Like Odysee's code can only be	
	12	modified by Odysee. That would make something	
	13	more centralized.	
	14	Q. Anything else?	
03:15	15		
	16	close source.	
	17	Q. Anything else?	
	18	A. It's kind of hard to say.	
	19	Q. What about what the what content	
03:16	20	is displayed on Odysee's website, would that be	
	21	a centralized feature if they could control	
	22	what's being displayed?	
	23	MR. DIXON: Objection as to form.	
	24	A. That would make something more	
03:16		centralized.	
			179

```
are either for the reflectors or the hub or
03:17
       1
       2
          video CDN?
       3
                     MR. DIXON: Objection as to form.
       4
               Α.
                     No.
                    So there are stand-alone servers for
03:18
      5
               Q.
      6
          the YouTube Sync system; is that correct?
      7
                     MR. DIXON: Objection as to form.
       8
               A .
                    I think so.
      9
                     And in terms of what gets recorded on
               Q.
03:18 10
         the blockchain for the YouTube Sync system, when
      11
          a video is published and claim made, is there
      12
          any annotation on the blockchain that it's part
      13
          of the YouTube Sync system?
      14
                     MR. DIXON: Objection as to form.
03:18 15
                    I'm pretty sure it's in the
               A .
      16
          description.
      17
                     So there's a -- there's a field that
               0.
      18
          says, "Description" and it will say that it's
      19
          part of the YouTube Sync system?
03:19 20
               A.
                    There's -- I think there's a link to
          the YouTube video.
      21
      22
               Q.
                    Why is there link to the YouTube
      23
          video?
      24
               A .
                    As -- as -- probably as reference
03:19 25
          from where it came from.
                                                                181
```

02.24	1		To that Odygoo year data?	
03:24		Q.	Is that Odysee user data?	
	2	Α.	I'm not sure.	
	3	Q.	Back to the YouTube Sync system.	
	4		Who pays for the publishing for the	
03:24	5	videos tha	t are copied and downloaded from	
	6	YouTube?		
	7		MR. DIXON: Objection as to form.	
	8	<b>A.</b>	Odysee.	
	9	Q.	And before Odysee, it was LBRY?	
03:24	10	A.	Yes.	
	11	Q.	It's not the YouTubers themselves?	
	12	A.	No. Unless they're running it.	
	13	Q.	Could they run their the YouTube	
	14	Sync syste	m?	
03:25	15	A.	Yeah. It's open source.	
	16	Q.	How many YouTubers do you know are	
	17	running th	e YouTube Sync system on LBRY servers	
	18	or on Odysee servers?		
	19	Α.	I don't think any of them are running	
03:25	20	Odysee ser	vers.	
	21		MR. MOORES: Can we go off the	
	22	record. T	ake a break.	
	23		VIDEOGRAPHER: The time right now is	
	24	3:25 p.m.	We are off the record.	
03:25	25		(At this time, a discussion	
				185

03:25	1	was held off the record.)		
	2	VIDEOGRAPHER: Time right now is		
	3	3:38 p.m. We are back on the record.		
	4	BY MR. MOORES:		
02.20	-			
03:38	5	Q. Before we broke, we were talking		
	6	about Exhibit number 99. I'd like to go back		
	7	excuse me to Exhibit 99.		
	8	In the in the meantime, who		
	9	created the YouTube Sync system?		
03:38	10	A. LBRY.		
	11	Q. How much LBC is required to operate		
	12	the YouTube Sync system?		
	13	MR. DIXON: Objection as to form.		
	14	A. I don't know.		
03:38	15	Q. If is that recorded somewhere?		
	16	Broken out in LBRY's ledger, as to how much LBC		
	17	is used the YouTube system?		
	18	MR. DIXON: Objection as to form.		
	19	A. I'm not sure.		
03:39	20	Q. Is there anyone who would know that,		
	21	that you're aware?		
	22	A. No.		
	23	Q. So looking back at Exhibit number 99.		
	24	There's a reference to moving more of the		
03:39	25	infrastructure out of AWS and into the bunker to		
			186	

03:42	1	Q.	What was that?	
	2	A.	I don't remember.	
	3	Q.	Was there a blockchain emergency that	
	4	had to be f	ixed with a hard fork?	
03:42	5	Α.	I don't think so.	
	6	Q.	There's a reference to LBRY TV in	
	7	your e-mail	. A few one dash up from the hard	
	8	fork emerge	ncy.	
	9		Do you see that?	
03:42	10	A.	Yes.	
	11	Q.	What is LBRY TV?	
	12	<b>A.</b>	It's a web service where people can	
	13	watch video	s that are on LBRY.	
	14	Q.	Is it similar to Odysee?	
03:43	15	A.	Yes.	
	16	Q.	Does it currently exist?	
	17	A.	No.	
	18	Q.	What happened to it?	
	19	A.	We shut it down.	
03:43	20	Q.	"We" is who?	
	21	A.	LBRY.	
	22	Q.	Whose decision was it to shut down	
	23	LBRY TV?		
	24	Α.	I don't remember exactly.	
03:43	25	Q.	Was it a collective decision of the	
				189

```
It says "We got 51 percent attacked
03:52
      1
               Q.
       2
          on the LBRY chain. Attacker exploited at least
       3
          one exchange, potentially three. We fought him
          off and made him spend a ton of BTC. Maybe all
03:52
      5
         he earned?"
       6
               A .
                     Right.
      7
               0.
                    Do you see that?
       8
               A .
                    Yes.
      9
                     And then he writes, "Monitored and
               Q.
03:52 10
          cleaned up from attack. Helped upgrade SPV
      11
          servers on Odysee."
      12
               A .
                     Right.
      13
              Q.
                     Does this refresh your recollection
          as to what the blockchain attack was?
      14
03:52 15
               A.
                     Yes.
                     What is a 51 percent attack?
      16
               0.
      17
                     It's when someone controls more than
               A .
      18
          half the hash rate that's mining the chain.
      19
                     And that's bad?
               0.
03:53 20
               A.
                    It would let them, like unilaterally
      21
          make changes.
      22
               Q.
                    To the blockchain?
      23
               A.
                     Yes.
      24
               Q.
                     Including the sort of ownership of
03:53 25
         LBC?
                                                                195
```

```
03:53
      1
                     Of some of the LBC. Like their LBC.
               A .
       2
               Q.
                     Whose LBC?
       3
                     The -- the person who controls that.
               A.
       4
          The hash rate.
03:53
      5
                     So they can -- I'm sorry.
              Q.
       6
                     What can they do with LBC?
      7
               A.
                     They can go back in the history of
          the blockchain.
      8
      9
               Q.
                     And rewrite who owns LBC?
03:53 10
               A .
                    Just their L --
      11
                     So what impact would that have?
               0.
      12
                     They could spend LBC, then go back in
               Α.
      13
          history and spend LBC again.
      14
               Q.
                     Sounds bad.
03:54 15
                     All right. So the attacker exploited
      16
          at least one exchange.
      17
                     What does that mean?
      18
                     That they spent LBC on an exchange,
      19
          then rolled it back and then spent LBC on an
03:54 20
          exchange again.
      21
                     So essentially, the traded the same
               Q.
      22
          LBC for say Bitcoin more than once?
      23
               Α.
                     Right.
      24
               0.
                     Tom writes, "We fought him off."
                     Were you part of the fighting off the
03:54 25
                                                                196
```

```
blockchain attack?
03:54
      1
      2
              A.
                    Yes.
       3
                    What did you do?
              Q.
                   We outbid him for the hash rate he
       4
              A .
03:55
      5
         was using.
                    What does that mean?
      6
              Q.
      7
              A.
                    He was renting hash rate on a hash
         rate marketplace. And we outbid him for the
      8
         hash rate.
03:55 10
              Q. So he wasn't sort of mining more than
      11
          51 percent, he was buying other people's hash
      12
         rate mining?
     13
              A.
                    Yes.
                   And how was this attack discovered by
     14
              Q.
03:55 15
         LBRY?
                    We have a system that monitors the
      16
              A.
     17
         blockchain for large reorgs and we noticed a
      18
         large reorg.
      19
                    So you spent LBC to outbid the hash
              Q.
03:55 20
         rate?
      21
              A .
                    No.
      22
              Q.
                    What did you spend to outbid for the
      23
          hash?
      24
              A .
                    Bitcoin.
03:56 25
                    Did that cost a lot of Bitcoin?
              Q.
                                                               197
```

1	Α.	I don't remember how much it cost.	
2	Q.	How long did it take to outbid the	
3	attacker?		
4	Α.	A few hours.	
5	Q.	Did that mean that you were then	
6	mining LBC	yourself? Sorry.	
7		Did that mean that LBRY was mining	
8	LBC at that	t time?	
9	Α.	No.	
10	Q.	Did LBRY earn any LBC for paying for	
11	all that ha	ash rate?	
12		MR. DIXON: Objection to the form.	
13	Α.	I think so.	
14	Q.	Whose decision was it to fight him	
15	off?		
16	<b>A</b> .	It may have been mine.	
17	Q.	Why did you want to fight him off?	
18	<b>A</b> .	He was doing something that is	
19	against wha	at LBRY users would want.	
20	Q.	Did you I'm sorry.	
21		Did LBRY publicize its successful	
22	defense of	the blockchain?	
23		MR. DIXON: Objection to the form.	
24	Α.	I don't remember us doing that.	
25	Q.	So no post or anything about it?	
	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	2 Q. 3 attacker? 4 A. 5 Q. 6 mining LBC 7 8 LBC at that 9 A. 10 Q. 11 all that ha 12 13 A. 14 Q. 15 off? 16 A. 17 Q. 18 A. 19 against wha 20 Q. 21 22 defense of 23	Q. How long did it take to outbid the attacker?  A. A few hours.  Q. Did that mean that you were then mining LBC yourself? Sorry. Did that mean that LBRY was mining  BLBC at that time? A. No. Q. Did LBRY earn any LBC for paying for all that hash rate?  MR. DIXON: Objection to the form.  A. I think so. Q. Whose decision was it to fight him off?  A. It may have been mine. Q. Why did you want to fight him off?  A. He was doing something that is against what LBRY users would want. Q. Did you I'm sorry. Did LBRY publicize its successful defense of the blockchain?  MR. DIXON: Objection to the form.

04:01	1	A. Right.		
	2	Q. So was there any effort to fix that,		
	3	like, double sale?		
	4	MR. DIXON: Objection to the form.		
04:01	5	A. It depends on how it worked at the		
	6	exchange, like whether they managed to catch it		
	7	in time or not.		
	8	Q. So do you know if they if the		
	9	exchange caught it in time?		
04:01	10	A. I think some of them may and some of		
	11	them may not. I'm not sure. But I think we did		
	12	offer to give them LBC if they lost any.		
	13	Q. So LBRY offered to make the exchange		
	14	whole, essentially?		
04:02	15	MR. DIXON: Objection to the form.		
	16	A. I don't know exactly what the the		
	17	conversation was.		
	18	Q. Who communicated to the exchanges?		
	19	A. It was probably Tom or Josh.		
04:02	20	Q. Were you copied on any e-mails with		
	21	the exchanges?		
	22	A. Probably.		
	23	Q. Have you communicated with exchanges		
	24	in the past?		
04:02	25	A. Yes.		
			201	

04:03	1	Q.	Which exchanges have you communicated	
	2	with?		
	3	Α.	With Bittrex. There may have been	
	4	others. I	don't remember.	
04:03	5	Q.	What were you communicating with	
	6	Bittrex abo	out?	
	7	Α.	They had a problem with their LBRY	
	8	CRD instan	ce.	
	9	Q.	Is that L-B-R-Y, C-R-D?	
04:03	10	Α.	Yes.	
	11	Q.	And what did you do for them?	
	12	A.	I talked to them about what might fix	
	13	it.		
	14	Q.	And was the problem ultimately fixed?	
04:03	15	Α.	Yes.	
	16	Q.	Did anyone else at LBRY get involved	
	17	in fixing the problem?		
	18	<b>A.</b>	Yes.	
	19	Q.	Who was that?	
04:04	20	<b>A.</b>	Brannon.	
	21	Q.	King?	
	22	A.	Yes.	
	23	Q.	Just looking a back at Exhibit 100,	
	24	the page ending 838, sort of middle of the page,		
04:04	25	there's a	reference to "Turn off 3X rewards for	
				202

	1	identification.)					
	2	(Exhibit 102 was marked for					
	3	identification.)					
	4	Q. Sir, you've just been handed what has					
04:07	5	been marked as Exhibit number 102. It's a					
	6	multiple-page document beginning on Bates number					
	7	LBRY_000523. It is purports to be an e-mail					
	8	from yourself sent to a Job Evers-Meltzer.					
	9	Which is E-V-E-R-S, hyphen, M-E-L-T-Z-E-R. It					
04:08	10	is dated December 22, 2016. And the subject is					
	11	"Needing an open beta."					
	12	Do you see Exhibit number 102?					
	13	A. Yes.					
	14	Q. So this references a conversation					
04:08	15	communication back and forth with Job					
	16	<pre>Evers-Meltzer; is that right?</pre>	Evers-Meltzer; is that right?				
	17	A. Yes.					
	18	Q. And who is Evers-Meltzer?					
	19	A. He worked at LBRY.					
04:08	20	Q. And there's also a reference down					
	21	here to Jack Robison.					
	22	A. Right.					
	23	Q. And I think you've already testified					
	24	about him today, right?					
04:08	25	So one of the questions I have for					
			205				

```
04:17
       1
          places.
       2
               Q.
                     Why did you share this with the
       3
          public?
                    It's nice to celebrate.
       4
               Α.
04:17
       5
                     To celebrate your accomplishments?
               Q.
                     I would say --
       6
               Α.
       7
                     MR. DIXON: Objection to the form.
                     -- to celebrate everyone's
       8
               Α.
       9
          accomplishments.
04:17 10
               Q.
                     Looking at the first item on the
      11
          timeline here, in the X axis, "June 2016, first
      12
          LBRY blockmine."
      13
                     Do you see that?
      14
               A.
                    Yes.
04:18 15
                    Is that the premine?
               Q.
      16
               A.
                     No.
                    What's the first block?
      17
               Q.
      18
                    It's the first block in the
               A.
         blockchain.
      19
04:18 20
              Q.
                     The Genesis Block is not the first
      21
          block?
      22
               A .
                     No.
                     What's the Genesis Block?
      23
               Q.
                     Like the zero block.
      24
               A.
                     All right. So the premine was
04:18 25
               Q.
                                                                 212
```

04:18	1	blocked in	the zero block?	
	2	A.	Yes.	
	3	Q.	So the first block is mined by	
	4	somebody o	ther than LBRY; is that right?	
04:18	5	<b>A</b> .	No.	
	6	Q.	So LBRY mined the first block?	
	7	<b>A.</b>	Yes.	
	8	Q.	LBRY mined the zero block	
	9	Α.	Nobody mined the zero block.	
04:18	10	Q.	You just you just get it?	
	11	A.	It's hardcoded.	
	12	Q.	So LBRY mined the first block.	
	13		And did it concurrently, it	
	14	received t	he LBC from the Genesis Block?	
04:19	15		MR. DIXON: Objection to the form.	
	16	Α.	No.	
	17	Q.	So how did when did LBRY receive	
	18	its premin	e?	
	19	Α.	Never. It's kind of always had it.	
04:19	20	Q.	So there's 400 million LBC in the	
	21	premine, c	orrect?	
	22	Α.	Yes.	
	23	Q.	When is the first time LBRY had	
	24	possession	of those 400 million LBC?	
04:19	25	Α.	When it hardcoded them.	
				213

04:19	1	O And when did it hands als them?	
04:19		Q. And when did it hardcode them?	
	2	A. I don't know when the code was	
	3	written.	
	4	Q. So if you go to the Block Explorer,	
04:20	5	when would it say that LBRY possessed the	
	6	premine for the first time?	
	7	MR. DIXON: Objection to the form.	
	8	A. I don't know if it says things like	
	9	that.	
04:20	10	Q. It says the start date for what's	
	11	been recorded, correct?	
	12	MR. DIXON: Objection to the form.	
	13	A. Yes, I guess.	
	14	Q. So when is the first time that LBRY	
04:20	15	could have transferred any of its LBC from the	
	16	premine?	
	17	MR. DIXON: Objection to the form.	
	18	A. I think it would be the first block.	
	19	Unless there was some kind of time block on it.	
04:20	20	Q. So prior to June of 2016, could LBRY	
	21	have transferred LBC from its premine to a	
	22	third-party?	
	23	A. No.	
	24	Q. Prior to and that would be the	
04:21	25	date of the launch of the of the protocol; is	
			214

```
that right?
04:21
      1
                     I'm not sure if that's how we've
       2
               A.
       3
          always talked about it. But I think of the
          launch of the blockchain as being the first
04:21
      5
          block.
       6
                    The launch of the blockchain is the
               Q.
       7
          first block?
               A.
       8
                     Yes.
       9
                     And prior to that, did LBRY ever
               Q.
04:21 10
          promise anyone LBC?
      11
                     Well, there was one you showed me.
               Α.
      12
          Right?
      13
               Ο.
                     Right.
                     Like if you sign up, you are an alpha
      14
04:22 15
          tester, we'll give you a thousand LBC?
      16
               Α.
                     If you call it a promise, then --
      17
          then yes.
      18
                     It's at least an offer for someone to
               0.
      19
          get a thousand LBC for being an alpha tester,
04:22 20
          correct?
      21
                     MR. DIXON: Objection to the form.
      22
               Α.
                     I -- I quess.
                     So there's a reference here to -- in
      23
               0.
          September of 2017, I'm talking about on
      24
          Exhibit 104, that LBC tipping goes live.
04:22 25
                                                                 215
```

04:25	1	Is that the same as payment for the	
	2	video content?	
	3	A. No.	
	4	Q. What is payment for video content?	
04:25	5	A. Payment is when there's a claim that	
	6	says it requires a payment. And then you send	
	7	the payment to the address that's listed there.	
	8	Q. So when the publisher publishes	
	9	content and makes a claim in connection with the	
04:26	10	published, it can dictate whether or not a	
	11	payment is required for a consumer to access the	
	12	content?	
	13	A. Right.	
	14	Q. And in terms of the YouTube Sync	
04:26		Q. And in terms of the YouTube Sync program, did LBRY require payment for content	
04:26			
04:26	15	program, did LBRY require payment for content	
04:26	15 16	program, did LBRY require payment for content that was copied through the YouTube Sync system?	
04:26	15 16 17	program, did LBRY require payment for content that was copied through the YouTube Sync system?  A. No.	
04:26	15 16 17 18 19	program, did LBRY require payment for content that was copied through the YouTube Sync system?  A. No.  MR. DIXON: Objection to the form.	
	15 16 17 18 19	program, did LBRY require payment for content  that was copied through the YouTube Sync system?  A. No.  MR. DIXON: Objection to the form.  Q. Is payment available through all of	
	15 16 17 18 19 20	program, did LBRY require payment for content  that was copied through the YouTube Sync system?  A. No.  MR. DIXON: Objection to the form.  Q. Is payment available through all of the LBRY applications over time?	
	15 16 17 18 19 20 21	program, did LBRY require payment for content  that was copied through the YouTube Sync system?  A. No.  MR. DIXON: Objection to the form.  Q. Is payment available through all of the LBRY applications over time?  MR. DIXON: Objection to the form.	
	15 16 17 18 19 20 21 22	program, did LBRY require payment for content  that was copied through the YouTube Sync system?  A. No.  MR. DIXON: Objection to the form.  Q. Is payment available through all of the LBRY applications over time?  MR. DIXON: Objection to the form.  A. No.	
	15 16 17 18 19 20 21 22 23 24	program, did LBRY require payment for content  that was copied through the YouTube Sync system?  A. No.  MR. DIXON: Objection to the form.  Q. Is payment available through all of the LBRY applications over time?  MR. DIXON: Objection to the form.  A. No.  Q. Which ones was it not available?	

04:28	1	mobile application at the point that Odysee	
	2	started?	
	3	A. Yes.	
	4	Q. When LBRY or Odysee publishes	
04:28		content, does it require payment?	
	6	MR. DIXON: Objection to the form.	
	7	A. Maybe sometimes.	
	8	Q. Can you remember a piece of content	
	9	that LBRY published that when it was completing	
04:29	10	the claim, it required payment?	
	11	A. Yes.	
	12	Q. What was that?	
	13	A. It's a video that Jeremy published.	
	14	To show that people can pay for videos.	
04:29	15	Q. Besides that sort of examplar	
	16	published by LBRY, can you think of any other	
	17	content that LBRY published that wasn't free	
	18	content?	
	19	A. I published content that wasn't free.	
04:29	20	Q. On behalf of the company or you	
	21	personally?	
	22	A. I guess me personally. I can't think	
	23	of another one.	
	24	Q. In terms of what's recorded on the	
04:30	25	blockchain, is whether or not a payment has been	
			220

04:30	1	made recorded on the blockchain?	
	2	A. Yes.	
	3	Q. And there's a field where it's	
	4	designated as a payment as opposed to say a tip?	
04:30	5	A. Yes.	
	6	Q. In terms of tipping, how was that	
	7	recorded on the blockchain as opposed to some	
	8	other transfer of LBC from person X to person Y?	
	9	A. Tip is a support claim where the	
04:30	10	person that you are tipping is the one that can	
	11	spend it.	
	12	Q. So how does that differ if I was to	
	13	transfer John Dixon ten LBC from my digital	
	14	wallet to his digital wallet?	
04:31	15	A. That wouldn't be a claim at all.	
	16	That would just be a transaction.	
	17	Q. So a claim is designated as such on	
	18	the blockchain, correct?	
	19	A. Yes.	
04:31	20	Q. And a payment is designated as what	
	21	on the blockchain?	
	22	A. A payment is a transaction.	
	23	Q. Is that the same as me sending to	
	24	John ten LBC because he did something cool?	
04:31	25	A. There's extra info that says it's a	
			221

04:31	1	payment.		
	2	Q.	So there is there is information	
	3	_	ckchain which designates that it's a	
	4	payment?	one in a line of the control of the	
04:31	5	A.	Yes.	
04.31	6			
	7	Q.	Are there other types of supports	
		other than	-	
	8	Α.	Yes.	
	9	Q.	What are those?	
04:32	10	Α.	There's like just supports.	
	11	Q.	The Venn diagram of supports, there's	
	12	the big box	which is supports and then within	
	13	that is tip	os?	
	14	Α.	Yes.	
04:32	15	Q.	But then outside of the tips, is just	
	16	supports?		
	17	Α.	Yes.	
	18	Q.	And what are just supports?	
	19	Α.	It's a support where you retain the	
04:32	20	ability to	spend it.	
	21	Q.	You the person who	
	22	Α.	The person who sent it.	
	23	Q.	Now, is it actually sent?	
	24	Α.	So no, it's not sent.	
04:32	25	Q.	It just recorded on the blockchain as	
				222

04:32	1	a support, but it's the the possession of the	
	2	LBC stays with me; is that correct?	
	3	A. Yes.	
	4	Q. I can terminate the support at any	
04:32	5	time?	
	6	A. Yes.	
	7	Q. So I can run like a a query, a	
	8	ChainQuery and figure out how many supports I've	
	9	tendered to somebody else if I want to?	
04:33	10	A. Yes.	
	11	Q. And I would do that based upon my	
	12	digital asset I'm sorry, digital asset wallet	
	13	address?	
	14	A. Yes.	
04:33	15	Q. So, for example, if I wanted to	
	16	figure out how many LBC LBRY has provided in	
	17	supports, I can type in or filter by LBRY's	
	18	wallet addresses and that would tell me how many	
	19	supports LBRY has at any given time?	
04:33	20	A. Yes.	
	21	MR. DIXON: Objection to the form.	
	22	Q. And in terms of historical data, all	
	23	of the supports that have already been made	
	24	through the LBRY blockchain is recorded?	
04:33	25	A. Yes.	
			223

04:33	1	Q. So in theory, I can say as of	
	2	January 1, 2020, I can run a query and figure	
	3	out how many supports are currently, or then in	
	4	place on the LBRY blockchain?	
04:34	5	A. Yes.	
	6	Q. When did just supports start?	
	7	A. They've always been there.	
	8	Q. So it was always available?	
	9	A. Yes.	
04:34	10	Q. And and non-tipping supports were	
	11	always available through LBRY applications?	
	12	A. I'm not sure if there was ever a time	
	13	when they weren't.	
	14	Q. So the desktop application, for	
04:34	15	example, as far as you can remember, you could	
	16	always support a publisher?	
	17	A. Yes.	
	18	Q. It just took a little while for at	
	19	least tipping to be supported by the LBRY	
04:35	20	applications?	
	21	A. Yes. But it was always possible on	
	22	the blockchain.	
	23	Q. So we covered payments, tips,	
	24	supports, claims.	
04:35	25	What other ways	
			224

0.4.05	4		
04:35	1	A. You're like an expert now.	
	2	Q. What other ways can one use LBC	
	3	through a LBRY application?	
	4	A. I'm not thinking of anything.	
04:36	5	Q. And so if if I was looking at the	
	6	blockchain, just looking at it, and I	
	7	five minutes before had transferred to John ten	
	8	LBC because, again, he had done something cool,	
	9	you are saying that that would be recorded	
04:36	10	differently than a payment, a tip, and support	
	11	or a claim?	
	12	A. Yes.	
	13	Q. Would that transfer of LBC, it would	
	14	be recorded on the chain, though, correct?	
04:36	15	A. Yes.	
	16	Q. So on Exhibit number 104, in June of	
	17	2019, there's a reference to one million claims	
	18	made.	
	19	Is that claims similar to what we had	
04:37	20	described before as someone claiming a	
	21	address on the chain?	
	22	A. Claiming a name.	
	23	Q. Sorry. Claiming a name.	
	24	A. Yes.	
04:37	25	Q. Live streaming released, which	
			225

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06:09
                     This fall sometime.
       1
               Α.
       2
               Q.
                     Fall of 2021?
       3
                     Yeah. Around there. Could have been
               Α.
          a little earlier.
       4
06:09
       5
                     So at least within the year of 2021?
               Q.
       6
               Α.
                     Yes.
                    Who is Oleg Siskin?
       7
               Q.
                    He did some work for LBRY at some
       8
               A.
       9
          point.
06:09 10
                     "Work for LBRY," meaning LBRY paid
               Q.
      11
          him for work?
      12
                     I'm not sure if we paid him.
               A .
      13
               Q.
                    Who is Jeffrey Picard?
                    He works for LBRY.
      14
               A .
06:09 15
                    You mentioned a Mark Femur (phonetic)
               Q.
      16
          beforehand; is that right?
      17
               A.
                     Yes.
      18
               0.
                     Who is Neill Miller?
                     He used to work for LBRY.
      19
               A.
06:09 20
                     MR. MOORES: Neill is with two Ls,
      21
          for the record.
      22
               Q.
                    Who is Kok-Pin Yeoh?
      23
                     He works for Odysee.
               A .
      24
                     MR. MOORES: That's K-O-K, hyphen,
06:10 25
          P-I-N. Last name Y-E-O-H. For the record.
                                                                 269
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06:10	1	Q.	Who is Liam Cardenas?
	2	<b>A.</b>	He used to work for LBRY.
	3		MR. MOORES: For the record,
	4	C-A-R-D-E-N	N-A-S.
06:10	5	Q.	Who is Travis Eden?
	6	A .	He used to work for LBRY.
	7	Q.	Who's Xander Luciano?
	8	A .	He used to work for Odysee.
	9	Q.	Who is Paul Webb?
06:10	10	A.	He used to work for LBRY.
	11	Q.	Who is Anthony Mayfield?
	12	A.	I believe he works for LBRY for
	13	Odysee.	
	14	Q.	Who is Igor Gassmann?
06:10	15	<b>A</b> .	He used to work for LBRY.
	16	Q.	Who is Zhu Dung Li (phonetic)?
	17	<b>A</b> .	I think that's Roy.
	18	Q.	And who is Johnny Nelson?
	19	<b>A</b> .	He works for Odysee.
06:11	20	Q.	Have you ever participated in a LBRY
	21	program by	which you purchased LBC?
	22	Α.	Yes.
	23	Q.	When did you first participate?
	24	Α.	Sometime last year, I believe.
06:11	25	Q.	In 2021?
			270